



# Report to the 62nd Legislature

---

## Use of Nongame Check-off Funds in the Nongame Portion of FWP's Wildlife Program

---

**December 2010**



Photo credits: Kristi Dubois (American kestrel,  
Council Grove State Park)



Prepared by



***Montana Fish,  
Wildlife & Parks***

PROJECT REPORT SUMMARY - NONGAME CHECK-OFF FUNDS  
FY10 & FY11

Donations to the Nongame Wildlife Tax Check-Off of Montana's income tax form are used to make progress toward three primary goals:

1. Keep common wildlife species common.
2. Reverse population declines of wildlife species deemed "of concern" in Montana (<http://fwp.mt.gov/wildthings/concern/default.html>) to prevent the need for future listing under the federal Endangered Species Act (ESA).
3. Foster awareness and appreciation of *all* Montana's wildlife, through outreach, technical assistance, and citizen science.

<b>FY2010/FY2011 Projects</b>	<b>FY10</b>	<b>FY11</b>
<b>Common loon conservation and nongame species monitoring efforts in northwest Montana</b>	<b>\$10,000</b>	<b>\$6,000</b>

Montana has the largest breeding common loon population in the western continental United States, averaging 40-70 territorial pairs annually. Only 22 to 26 pairs nest successfully each year producing 30-49 chicks as counted in the mid-July Loon Day survey. The common loon is a Species of Concern in Montana due to small population size and sensitivity to activity during the nesting season. Active conservation efforts are deemed necessary to ensure that Montana's small nesting loon population is maintained in the long-term.

This cooperative project includes efforts to improve nesting success, monitor population trends, and educate water-based recreationists and wildlife viewers. The Montana Loon Ranger Program is currently the main component to loon conservation in Montana. This program is a cooperative educational effort. Each summer, three to four seasonal loon rangers cover lakes in the Clearwater, Thompson Chain of Lakes, Kalispell, and Kootenai areas. Loon rangers educate the recreating public about the needs of nesting loons, post temporary "quiet" zones around occupied loon nests, and work with public land managers, lakeside homeowners, and volunteers to monitor loon nesting success. Loon rangers assist with other regional wildlife management priorities as time allows including distribution of 'living with wildlife' materials and surveying high priority nongame species such as leopard frogs, peregrine falcons, harlequin ducks and high elevation species.

An effort to complete the Montana Common Loon Conservation Plan was also partially funded with Nongame Check-Off dollars in FY2010. A final plan was completed in the summer of 2010.

FY2011 funds will be used to continue loon ranger and species monitoring work.

Project Cooperators and Matching Funds: Project funds are matched with federal State Wildlife Grant dollars, non-federal partner contributions and in-kind donations. Project partners include Montana Loon Society, Plum Creek Timber Company, US Forest Service, Montana Dept of Natural Resources and Conservation, the Biodiversity Research Institute, Glacier National Park, Confederated Salish and Kootenai Tribes, and private landowners.

**Bald eagle monitoring and management plan supplement** **\$8,735** **\$5,000**

The bald eagle population in Montana is considered one of the most productive populations in the western United States. In 1994, when the Montana Bald Eagle Management Plan was completed, Montana had approximately 156 active bald eagle territories. Population models estimated that Montana could support as many as 345 occupied territories by the year 2033 if sufficient habitat existed. In 2006, Montana's population surpassed this population target with 352 occupied territories. As of 2010, Montana had over 500 bald eagle territories.

The bald eagle's removal from the Endangered Species list in 2007 is a species conservation success story; however, increases in human population growth and development still threaten individual bald eagle nesting, foraging and roosting habitat sites. Annual monitoring at some level as well as management and conservation planning for bald eagle populations and their habitat in Montana remains critical. Approximately 85% of the bald eagle territories in Montana occur in counties with increasing human populations. Human population growth often translates into increased development. Many new subdivisions are proposed along riverfronts and lakeshores because these are desirable places to live. With around 75% of bald eagle nests located within ¼ mile of water (lakes and rivers) the risk for individual and population level impacts remains a significant concern. A 2010 supplement to the 1994 Montana Bald Eagle Management Plan and the 2009 Montana Bald Eagle Management Guidelines provide updated information and guidance for management of the species and habitat into the future.

FY2011 dollars will be spent monitoring expanding bald eagle distribution along with waterbird nesting territories. Montana Audubon and Breeding Bird Survey data indicates that great blue heron populations are declining across Montana. According to Montana Audubon data, statewide great blue heron populations have declined by 81% since 1967 (Hoffman and Ellis 2007) and according to Breeding Bird Survey data, Montana great blue heron populations declined by 5.3% annually between 1966 and 2007 (USGS data 2007).

Project Cooperators and Matching Funds: Project funds are matched with federal dollars, non-federal partner contributions and in-kind donations. Project partners include US Forest Service, US Bureau of Land Management, Plum Creek Timber, Montana Dept of Natural Resources and Conservation, Glacier National Park, and Montana Bald Eagle Working Group.

Hoffman, S. and Ellis J. 2007. Montana birds send warning about our water and wetlands. Montana Audubon Press Release. mtaudubon@mtaudubon.org. June 14, 2007

United States Geological Survey. 2007. North American Breeding Bird Survey Data. Great Blue Heron. Available online. <http://www.mbr-pwrc.usgs.gov/bbs/>

**Habitat conservation prioritization, management and monitoring** **\$25,000** **\$11,000**

Regional wildlife biologists use GIS technology, wildlife survey information, wildlife occupancy models, and habitat assessments to evaluate the relative importance of proposed habitat conservation projects. Biologists prioritize proposed habitat projects that meet the overall direction and objectives of the Comprehensive Fish and Wildlife Conservation Strategy for habitat and species conservation. Rapid and continued development in western Montana has resulted in a need for biologists to review proposals and prioritize monitoring and management

responses. Preliminary review of proposed land conservation projects and cursory site visits to assess wildlife species presence were conducted in FY2010.

The use of rest-rotation grazing on FWP Wildlife Management Areas was assessed as a management tool adopted to enhance vegetation and soil conditions of rangeland with the specific emphasis of providing abundant, high quality habitat for wildlife. While this has long been recognized as a beneficial approach for large herbivores, little is known regarding its effect on nongame species. A more thorough look at the diversity of species on these WMA's with regard to use between habitats and between grazing treatments began in FY2010 including species monitoring for mountain plover and burrowing owl.

Other specific management practices are being evaluated on WMAs including conifer removal from aspen and bitterbrush stands. Small mammal trapping prior to, and after logging in FY2010 is providing a before/after, control/treatment design. The WMA monitoring projects are the primary 'multi-species, landscape level, long-term' project in the regions.

FY2011 funds will be used to continue this work.

Project Cooperators and Matching Funds: Project funds are matched with Bonneville Power Administration and State Wildlife Grant funds.

#### **Statewide landbird monitoring**

**\$15,000**

**\$0**

Montana FWP, in conjunction with Rocky Mountain Bird Observatory; US Forest Service; US Bureau of Land Management; Northern Great Plains Joint Venture; South Dakota Game, Fish and Parks; Wyoming Natural Diversity Database; Audubon Wyoming and Wyoming Game and Fish Department conducted its first field season of landbird monitoring throughout the Badlands and Prairies Bird Conservation Region (BCR 17) in 2009. The BCR 17 landbird monitoring program used a newly-developed, spatially-balanced sampling design with the BCR as the sampling frame and stratification by land management boundaries and ecoregional attributes. This monitoring design allows inferences about avian species distributions and population sizes from small scales to entire BCRs, facilitating conservation from fine scales to national and international levels.

In 2009, 81 transects were surveyed in Montana.; 28 in North Dakota; 6 in Nebraska; 76 in South Dakota; and 35 in Wyoming. Field technicians conducted 2,675 point counts between 16 May and 15 July 2009 and detected 28,821 birds of 184 species throughout BCR 17. We estimated BCR-level densities, stratum-level densities and population estimates for 55 landbird species, including 11 priority species. The data yielded robust density estimates for 46 of these species at the BCR scale and for 52 of these species in at least one stratum. Given similar sampling effort and avian population dynamics in future years, we would be able to detect changes in population status of these species. Occupancy modeling will allow partners to monitor populations of avian species that are rare or difficult to detect.

Efforts continued statewide in Montana in 2010 with Rocky Mountain Bird Observatory supervising field work in FWP Regions 1, 2, 3, 5, and 7; and Montana Natural Heritage Program supervising crews in Regions 4 and 6. The same sampling units (minus a few) in BCR17 will be visited in FY2011.

Project Cooperators and Matching Funds: Project funds are matched with State Wildlife Grant funds, other federal dollars and non-federal partner contributions. Project partners include Rocky Mountain Bird Observatory, US Forest Service, US Bureau of Land Management, and Montana Natural Heritage Program.

**Support publishing and distribution of educational materials                      \$3,900                      \$0**

Nongame Wildlife Check-Off donations help fund a variety of “Watchable Wildlife” projects that foster awareness and appreciation of our lesser-known wildlife species, and enhance public enjoyment of our common wildlife species.

Wildlife viewing has become a popular past time in Montana bringing revenue to rural communities and fostering appreciation of nongame species. Nongame Wildlife Check-Off donations were used in FY2010 to support the publication of two pocket wildlife guides. The ‘Sagebrush Guide to Birds’ and the ‘Prairie Guide to Birds’ are both small, traveling bird identification books targeted at specific habitats found across Montana. These pocket guides were distributed at public meetings, like the Prairie Dog Working Group Meeting, and wildlife festivals to encourage wildlife viewing. Nongame Check-Off funds were also used to support the publication of a checklist of Montana dragonflies and damselflies. Checklists such as these provide a unique wildlife viewing challenge to nongame wildlife enthusiasts.

Nongame Check-Off dollars were used in FY2010 to support the “Birds of Montana” book. This is a complete guide to the over 400 Montana avian species and will be a useful ornithological reference that increases awareness of conservation issues regarding birds and their habitats. Information on history, behavior and general biology will be included providing bird enthusiasts and conservationists a useful field and planning tool.

Project Cooperators and Matching Funds: Local Audubon chapters and volunteers donate data and in-kind funding to the above projects.

<b>New Projects for FY2011</b>	<b>FY10</b>	<b>FY11</b>
<b>Citizen Science Coordinator</b>		<b>\$2,500</b>

Citizen scientists across the nation are collecting biological data and promoting wildlife conservation. Montana FWP along with cooperators like the US Forest Service have used citizen scientists in the past to survey flammulated owls and waterbirds. The inventory needs for sensitive species however are broad and outside the resources currently available by FWP alone. Using a small portion of Nongame Check-Off funding to support a cooperative, interagency position will allow greater use of volunteers to collect nongame species information. The coordinator will first focus on utilization of citizen scientists for the continued monitoring of flammulated owls, waterbirds and raptors. New programs that use volunteers to survey night hawks and high elevation species sensitive to climate change will be developed.

Project Cooperators and Matching Funds: US Forest Service, Avian Science Center, Montana Audubon, and Montana universities.

**Student Stipend****\$5,000**

A competitive stipend for one Montana university graduate student will be awarded to support nongame wildlife research projects. This award will boost communications among FWP and Montana universities through a competitive application process. This award will also incentivize universities and students to ensure research projects have direct wildlife or habitat management implications.

Project Cooperators: Montana universities.

**Climate change monitoring in western Montana****\$6,000**

Survey and monitoring efforts are needed for species most sensitive to climate change throughout western Montana. Baseline information is needed for many of these high risk species to inform management decisions and future prioritization of spending. Interns will be used to collect observation data for species such as Clark's Nutcracker, pika, golden-mantled ground squirrel, and wolverine. Mileage and per diem for volunteers will also be reimbursed for data gathering.

Project Cooperators and Matching Funds: US Forest Service, Avian Science Center, Montana Audubon, and Montana universities.

**Region 4/5 Technician****\$20,000**

Montana FWP Regions 4 and 5 currently share one biologist that specializes in nongame work. This work includes commenting on habitat and land projects, responding to public requests for information, assessing the impacts of energy and subdivision development and working with outside entities to coordinate monitoring and conservation projects. Biological technician help is needed to establish diversity/nongame surveys on FWP managed property to assess management actions such as weed control and rangeland rehabilitation, conduct and report routine or special wildlife surveys such as annual bald eagle surveys or periodic mountain plover surveys. This technician could also provide wildlife related information to the public and assist the regional biologist in requests for technical assistance related to land management activities and their potential impact to wildlife. This technician would be a much needed regional staff member to promote the nongame program while fulfilling the objectives of the Department relative to species and habitat conservation.

Project Cooperators and Matching Funds: State Wildlife Grant funds and possible non-federal cooperators.

**Online Resources**

FWP WEBSITE: <http://www.fwp.mt.gov>

Montana Natural Heritage Program Website: <http://mtnhp.org>

FWP and Natural Heritage Program Species of Concern List: <http://fwp.mt.gov/wildthings/concern/default.html>